**Measurement**

Day 1-Measurement with a ruler- inches

Show students a ruler on the activboard. Discuss all aspects (12 inches in a foot, in=inches, ft=foot, mi=mile.

Model counting by halves (1, 1 ½, 2, 2 ½, etc)

Discuss things that can be measured by each. (ie. A shoe, the whiteboard, the distance from here to Nashville)

Have students take out their rulers. Touch the inch side. Have students touch various measurement (5 inches, 7 ½ inches)

Give everyone a *Measuring to the Nearest Half-Inch* sheet. Do independently and check after about 5 minutes.

Day 2- Measuring using Centimeters

On the ActivBoard, study the cm side of the ruler.

Look at desk ruler. Locate several measurements on it. Go around and check accuracy.

Once students seem proficient at this, send students on a metric scavenger hunt. After about 10 minutes, model the measurement and check answers.

Place students with partners. Students will complete *Body Part Measurement* sheet.

Day 4- Area (make sure floors are boxed off with blue tape)

Discuss that the area of a shape is like the yard. It’s all of the area inside a fence. Model how to count area in the form of boxes on square cm paper. Explain to students that if you are dealing with squares or units, you must include the unit plus the squared. Area and squared are best friends. They never go anywhere without the other.

Go over designs on the floor. Measure each square (12 x 12) and talk about how they equal one square foot each. Calculate the area of each shape, also discussing the types of polygons and their characteristics. Model writing the area on the board.

Demonstrate how to calculate halves. Two halves equal one whole.

Show students that Area=length times width, or bottom x side.

Allow students to complete the Square Unit ws. Give them about 7 minutes and then discuss, checking for units.

If all the students understand, give them the Area of a Rectangle sheet as independent work.

Day 3- Arrays

Pass out 8 color tiles for each student. Have them make a rectangle using all 8 tiles. Ask students what they look like (2 x 4, 4 x 2, 8 x1, or 1 x 8) Discuss that these are all of the ways that you can make a rectangle with all 8 tiles

\*Introduce factoring (1,2,4,8) and the commutative property of multiplication.

Give them 4 more tiles and see what they come up with. List all of the possible combinations on the board.

Have students put their tiles into groups of 4 or 5. Ask students to decide how they could make a rectangle using all of their tiles. Once students have come up with an array, give them each an array sheet to record their array. Students must then explain to the teacher what strategy they used to make their rectangle. Discuss with class.

Day 5- Area

Review Area by counting units and writing the area.

Show students how to find area by multiplying length times width. Practice finding the area of shapes that do not contain boxes.

Find the area of the classroom.

Have students predict the area of their foot. Record on board.

Allow students to trace their foot onto a piece of centimeter paper. Color whole units one color, halves in another, and smaller parts into another to calculate the area of their foot.

Day 6- Perimeter

Discuss that perimeter is the fence around your yard. Add the length of each side. There is no squared in perimeter because you are not dealing with square units but with lines.

Model how to find the perimeter of a rectangle or square by using the blue shapes on the floor. Using a dry erase marker, write the perimeter of each shape on the floor.

Practice modeling finding the perimeter on the board.

Bring a small group of students to the table to work on the teacher created area/perimeter sheet.

Allow other students to work on Roller Skating Rink Design.

Day 7- Gingerbread House

Review measurement, area, and perimeter.

Give students a *Gingerbread House Area and Perimeter* sheet. Discuss.

Have students record predictions.

Pass out 3 graham crackers per student. Have them fond the area and perimeter of each graham cracker. Once information has been recorded, students may construct their houses.